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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/314,172	05/19/1999	HIROKI KANNO	016907/0967	4798

7590 02/07/2005

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EXAMINER	
POKRZYWA, JOSEPH R	

ART UNIT	PAPER NUMBER
2622	

DATE MAILED: 02/07/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/314,172	KANNO ET AL.	
	Examiner	Art Unit	
	Joseph R. Pokrzywa	2622	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *18 January 2005*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *19-25 and 30-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *19-25 and 30-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 1/18/05 has been entered.

Response to Amendment

2. Applicant's amendment was received on 11/18/04, and has been entered and made of record. Currently, **claims 19-25, and 30-34** are pending.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 19-23, 25, 30, 31, 33, and 34** are rejected under 35 U.S.C. 103(a) as being unpatentable over Li *et al.* (U.S. Patent Number 5,506,697, cited in the Office action dated 8/19/04) in view of Schmid *et al.* (U.S. Patent Number 5,659,164).

Regarding ***claim 19***, Li discloses an image forming apparatus (see Figs. 3, 7 and 8, column 7, lines 53 through 56, and column 11, line 41 through column 12, line 2) comprising a scanner which reads a document and provides image data on the document as first image data (scanner 42, column 7, lines 48 through 54), an image processing unit which processes the first image data provided by the scanner (column 7, lines 48 through 61, and column 11, line 41 through column 12, line 34), a printer which forms an image on a sheet of paper corresponding to input image data (printer 46, column 7, line 56 through column 8, line 3, and column 12, lines 28 through 34), an operating condition image producing unit which produces image data as second image data (code symbol 45, being produced by the encoder 44, column 7, lines 46 through 56), indicative of operating conditions which determine image quality (column 8, lines 4 through 26, column 9, lines 12 through 42, and column 11, lines 20 through 40), a synthesizing unit which synthesizes the first image data read by the scanner and processed by the image processing unit with the second image data produced by the operating condition image producing unit (see Fig. 3, coded symbol 45, printed on document 50, column 7, line 56 through column 8, line 3), a control unit which controls the printer to form an image corresponding to the first and second image data synthesized by the synthesizing unit on the sheet of paper (see Fig. 3, coded symbol 45, printed on document 50, column 7, line 56 through column 8, line 3, and column 12, lines 11 through 20), a designating unit which designates whether or not the first image data obtained by the image processing unit should be synthesized with the second image data produced by the operating condition image producing unit (being the designation of encoded symbol mode, seen as step 172 in Fig. 8, column 12, lines 3 through 28), and the synthesizing unit synthesizes the first image data obtained by the image processing unit with the second image

data produced by the operating condition image producing unit and provides resultant synthesized image data in a case where the designating unit designates synthesis (step 180, when designated to be in the symbol mode, as "yes" in step 172, column 12, lines 11 through 20), and provides only the first image data obtained by the image processing unit in other cases (step 174, column 12, lines 6 through 10).

However, Li fails to expressly disclose if the produced second image data is indicative of operating conditions *which determine image quality of the scanner.*

Schmid discloses an image forming apparatus (see Figs. 2A-2C) comprising a scanner (scanner S) which reads a document and provides image data on the document as first image data (steps 14-18 in Fig. 3A, column 4, line 46-column 5, line 52), an image processing unit which processes the first image data provided by the scanner (computer program interfacing, column 4, lines 23-37, see Figs. 2B and 2C), an operating condition image producing unit which produces image data as second image data (column 4, line 46-column 5, line 23, see steps 22 and 23 in Fig. 3B), indicative of operating conditions which determine image quality of the scanner (column 4, lines 46-65).

Li & Schmid are combinable because they are from the same field of endeavor, being scanning devices that use data encoded on a sheet to determine operating conditions. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the operating conditions of the scanner, as taught by Schmid, within the system of Li. The suggestion/motivation for doing so would have been that Li's system would become more efficient with the addition of Schmid's teachings, since the system would recognize the scanner

configurations, as recognized by Schmid. Therefore, it would have been obvious to combine the teachings of Schmid with the system of Li to obtain the invention as specified in claim 19.

Regarding ***claims 20 and 21***, Li and Schmid disclose the apparatus discussed in claim 19, and Li further teaches that the operating condition image producing unit includes a character image data producing unit which produces a character image data indicative of the operating conditions and a pattern code image data producing unit which produces a pattern code image data indicative of the operating conditions (column 7, line 56 through column 8, line 34).

Regarding ***claims 22 and 30***, Li and Schmid disclose the apparatus discussed in claims 20 and 21, respectively, and Schmid further teaches that the operating condition image producing unit includes an input conditions indicative unit which produces an image data indicative of input conditions of the scanner (column 4, line 46-column 5, line 23, see steps 22 and 23 in Fig. 3B).

Li & Schmid are combinable because they are from the same field of endeavor, being scanning devices that use data encoded on a sheet to determine operating conditions. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the operating conditions of the scanner, as taught by Schmid, within the system of Li. The suggestion/motivation for doing so would have been that Li's system would become more efficient with the addition of Schmid's teachings, since the system would recognize the scanner configurations, as recognized by Schmid. Therefore, it would have been obvious to combine the teachings of Schmid with the system of Li to obtain the invention as specified in claims 22 and 30.

Regarding ***claims 23 and 31***, Li and Schmid disclose the apparatus discussed in claims 20 and 21, respectively, and Schmid further teaches that the operating condition image producing

unit includes a resolution and sampling rate indicative unit which produces an image data indicative of input conditions of the scanner (column 4, line 46-column 5, line 23, see steps 22 and 23 in Fig. 3B).

Li & Schmid are combinable because they are from the same field of endeavor, being scanning devices that use data encoded on a sheet to determine operating conditions. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to include the operating conditions of the scanner, as taught by Schmid, within the system of Li. The suggestion/motivation for doing so would have been that Li's system would become more efficient with the addition of Schmid's teachings, since the system would recognize the scanner configurations, as recognized by Schmid. Therefore, it would have been obvious to combine the teachings of Schmid with the system of Li to obtain the invention as specified in claims 23 and 31.

Regarding ***claim 25***, Li and Schmid disclose the apparatus discussed in claim 19, and Li further teaches that the operating condition image producing unit includes an output conditions indicative unit which produces an image data indicative of processing conditions of the image processing unit (column 4, line 62 through column 5, line 12, and column 8, lines 4 through 34).

Regarding ***claim 33***, Li and Schmid disclose the apparatus discussed in claim 21, and Li further teaches that the operating condition image producing unit includes a processing conditions indicative unit which produces an image data indicative of processing conditions of the image processing unit (column 4, line 62 through column 5, line 12, and column 8, lines 4 through 34).

Regarding ***claim 34***, Li and Schmid disclose the apparatus discussed in claim 21, and Li further teaches that the image corresponding to the second image data is user readable (column 6, lines 41 through 59).

5. **Claims 24 and 32** are rejected under 35 U.S.C. 103(a) as being unpatentable over Li *et al.* (U.S. Patent Number 5,506,697, cited in the Office action dated 8/19/04) in view of Schmid *et al.* (U.S. Patent Number 5,659,164), and further in view of Antognini *et al.* (U.S. Patent Number 6,176,427, cited in the Office action dated 8/19/04).

Regarding ***claims 24 and 32***, Li and Schmid disclose the apparatus discussed in claims 20 and 21, respectively, but fail to expressly disclose if the operating condition image producing unit includes an output conditions indicative unit which produces an image data indicative of output conditions of the image forming unit.

Antognini discloses an image forming apparatus (see Fig. 24) comprising a scanner which reads a document and providing image data on the document as first image data (being inherent in a facsimile machine, column 22, line 47 through column 23, line 7, column 47, lines 28 through 45, and column 48, lines 1 through 28), an image processing unit which processes the first image data provided by the scanner (steps 2401 and 2402, column 47, lines 28 through 38), a printer which forms an image on a sheet of paper corresponding to input image data (printed onto a substrate at step 2404, whereby a printer is inherently in a facsimile machine), an operating condition image producing unit which produces image data as second image data (digitally encoded substrate, see Figs. 1 and 2), indicative of operating conditions which determine image quality of the scanner (see Fig. 2, column 19, lines 3 through 26, column 20,

lines 15 through 57, and column 24, line 59 through column 25, line 14), a synthesizing unit which synthesizes the first image data read by the scanner and processed by the image processing unit with the second image data produced by the operating condition image producing unit (see Fig. 9, column 22, line 47 through column 23, line 7, and step 2404, column 47, lines 28 through 62), a control unit which controls the printer to form an image corresponding to the first and second image data synthesized by the synthesizing unit on the sheet of paper (step 2404 in Fig. 24, column 47, lines 28 through 62). Further, Antognini teaches that the operating condition image producing unit includes an output conditions indicative unit which produces an image data indicative of output conditions of the image forming unit (column 10, lines 34 through 46, and column 19, lines 3 through 26).

Li & Antognini are combinable because they are from the same field of endeavor, being systems that encode data on substrates. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to further include operating condition image producing means includes means for producing an image data indicative of output conditions of the image forming means, as taught by Antognini, in the system of Li. The suggestion/motivation for doing so would have been that Li's system would become more efficient, as Li's system would include the ability to determine the optimum printer/scanner combination for the desired output, as recognized by Antognini in column 1, lines 41 through 58, and column 4, lines 49 through 62. Therefore, it would have been obvious to combine Antognini's teachings with the system of Li and Schmid to obtain the invention as specified in claims 24 and 32.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joe Pokrzywa whose telephone number is (703) 305-0146. The examiner can normally be reached on Monday-Friday, 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward L. Coles can be reached on (703) 305-4712. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Joseph R. Pokrzywa
Examiner
Art Unit 2622

jrp